

## COMMON RADIAL PLANE MOTOR COOLING

### ABSTRACT OF THE DISCLOSURE

5           The present invention provides a method and apparatus for efficiently cooling a motor. Three components may be used to provide forced air through a motor and a motor bearing. An air guide plate may direct air in and out of a motor and move air through a bearing seal, a shaft, and the motor. The air guide plate also may shield the bearing from heat. A series of holes, with every  
10 other hole an inlet hole or an outlet hole, within the motor housing may be arranged in a common radial plane. The incoming air does not mix with the outgoing air. A series of fins on a rotor may move air in and out of the holes within the motor housing.